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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/027,677 | 12/20/2001 | Roger G. Etter | ENV1298-002J | 2635 |

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| EXAMINER | |
|---|---|
| NGUYEN, TAM M | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1764 | |

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/027,677 | ETTER, ROGER G. | |
| | Examiner | Art Unit | |
| | Tam M. Nguyen | 1764 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *09 November 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-5,21-23 and 48-63* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,21-23 and 48-63* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 April 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/09/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 55-63 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The subject matter in claims 55-63 was not described in the specification at the time the application was filed.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-5, 21-23, 48-54, and 55-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gamson (3,68697) in view of Mallari (4,797,197) and Wolf (5,849,050).

The modified process of Gamson in view of Mallari is as discussed in the previous Office Action.

Both Gamson and Mallari do not disclose a step of combustion of coke product.

Wolf discloses a process of combusting of coke. (See col. 1, lines 31-36)

Regarding claim 1, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Gamson/Mallari by combusting the coke product as taught by Wolf because it is well known that combusting coke would provide an energy source.

Regarding claims 56-63, Gamson does not disclose the operating conditions as claimed. However, Mallari discloses a coking process wherein the amount of VCM produced can be controlled by changing the operating conditions. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Gamson by controlling the operating conditions as claimed because one of skill in the art would operate the process at any temperature and pressure including the claimed temperature and pressure to produce a product comprising 40-100 % of sponge coke.

***Response to Arguments***

The argument that Gamson does not teach that the asphaltenes content of the coking feedstock can still form shot coke without sufficient levels of hydrocarbons and fails to teach or

suggest maintaining the ratio of asphaltic coke to thermal coke at a sufficiently low level for promoting the production of sponge coke is not persuasive. Gamson teaches that the higher the asphaltenes content of the feedstock mixture, the higher amount sponge coke will be formed (see col. 2, lines 31-34; col. 3, lines 15-19). Therefore, it is within the level of one of skill in the art to regulate the amount asphaltenes in the feedstock to produce a product comprising 40-100 W. % of sponge coke.

The argument that Gamson does not teach the production of sponge coke for use in a combustion process is not persuasive because of the new rejection above.

The argument that Gamson does not specifically teach how the conventional operating conditions promote sponge coke production is not persuasive because Mallari teaches that an amount VCM produced can be controlled by changing temperature and pressure. Therefore, It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process of Gamson by controlling the operating conditions as claimed because one of skill in the art would operate the process at any temperature and pressure including the claimed temperature and pressure to produce a product comprising 40-100 % of sponge coke.

The argument that Mallari does not teach the quenching step as claimed is not persuasive because Mallari discloses that the vapor is quenched in the coking drum as claimed. (See col. 9, lines 3-12)

The argument that the combination of the process of Gamson and the process of Mallari is improper is not persuasive because Mallari teaches that the process is enhanced when a quench medium is used to quench the vapor in the coking drum and teaches that the amount of VCM

produced can be controlled by operating conditions. One of skill in the art would employ the teaching of Mallari in the process of Gamson when a certain amount of VCM is desired in the product.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam M. Nguyen whose telephone number is (571) 272-1452. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tam M. Nguyen
Examiner
Art Unit 1764

TN

Walter D. Griffin
Primary Examiner